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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/782,316	02/19/2004	Thomas J. Endres	S0465/283640	7621	
25096 PERKINS COI	7590 04/16/200 E LLP	9	EXAMINER		
PATENT-SEA	,	BAYARD, EMMANUEL			
P.O. BOX 1247 SEATTLE, WA 98111-1247			ART UNIT	PAPER NUMBER	
			2611		
			MAIL DATE	DELIVERY MODE	
			04/16/2009	PAPER	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/782,316	ENDRES ET AL.		
Notice of Allowability	Examiner	Art Unit		
	Emmanuel Bayard	2611		
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commul GHTS. This application is s	this application. If not included unication will be mailed in due course.		
2. ☑ The allowed claim(s) is/are <u>1,3 and 4</u> .				
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority ur</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>	e been received. e been received in Application	n No	n the	
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4.  A SUBSTITUTE OATH OR DECLARATION must be subm	IENT of this application.			
INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  1) hereto or 2) to Paper No./Mail Date  (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).  6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.				
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6.  ☐ Interview S Paper No./ 7.  ☑ Examiner's	formal Patent Application ummary (PTO-413), Mail Date Amendment/Comment Statement of Reasons for Allowance		

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### **DETAILED ACTION**

This is in response to amendment RCE filed on 3/13/09 in which claims 1, 3-4 are pending. The applicant's amendments have been fully considered therefore this case is in condition for allowance. In addition the pending claims have been renumbered as 1-3, respectively.

#### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Chun M, Ng on 4/9/09.

The application has been amended as follows: in claim 1, line 9 after weight ----, wherein said combining weight is based on a normalized difference between said soft and hard decision samples ----.

## Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: the prior arts of record fail to anticipate or render obvious the following recited features: wherein said combining weight is based on a normalized difference between said soft and hard decision samples using said control signals to jointly determine operation of said timing

recovery module, said carrier recovery module, said automatic gain control module, and said equalization module as recited in claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

- 2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 3. Touzni U.S. Patent No 7,031405 B1.
- 4. Casas et al U.S. Patent No 7,027,500 B1.
- 5. Biracree U.S. Patent No 6,985,549 B1.
- 6. Isaksen et al U.S. Patent No 6,904,098 B1.
- 7. Yagi U.S. Patent No 5,995,168.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571 272 3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

4/16/2009

Emmanuel Bayard Primary Examiner Art Unit 2611

/Emmanuel Bayard/ Primary Examiner, Art Unit 2611